Remarks

Reconsideration of this Application is respectfully requested. Upon entry of the foregoing amendment, claims 16-20, 39 and 41-52 are pending in the application, with claims 16, 17, 19 and 20 being the independent claims. Claims 44-47 are withdrawn from consideration. Claims 16, 17, 19, 20, 39, and 50 are amended herein. Claims 1-15, 21-38 and 40 have been cancelled without prejudice to or disclaimer of the subject matter contained therein. The amendments submitted herewith are supported by the specification and original claims and do not add new matter. The amendments do not require a new search or raise new issues for consideration because they merely address issues already raised by the Examiner or define Applicants' invention more clearly. It is submitted that the amendments place the claims in condition for allowance or in better condition for appeal by reducing the number of issues for consideration on appeal. The amendments were not made earlier in the prosecution because it is maintained that the previously pending claims were allowable. Since the amendments do not add new matter or require a new search or consideration, and place the claims in condition for allowance or in better condition for appeal, entry of the amendments is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

I. Rejections Under 35 U.S.C. §112, 1st Paragraph

Claims 16-20, 39, 41-43 and 48-52 are rejected under 35 U.S.C. § 112 first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Office Action, page 2.

The Office Action contends that the specification lacks support for the recitation found in independent claims that the "label is not an amino acid." Applicants disagree that one skilled in the art, on reading the specification, would not appreciate that the inventors had fully contemplated the recited methods in which the label used was not an amino acid. Nevertheless, to expedite prosecution, Applicants have amended independent claims 16, 17, 19, and 20 to delete the phrase "with the proviso that the label is not an amino acid." Applicants therefore respectfully request that this rejection of claims 16-20, 39, 41-43 and 48-52 under 35 U.S.C.§ 112, first paragraph be removed.

The Office Action also rejects claims 16-20, 39, 41-43 and 48-52 for reciting that a labeled molecule is ligated to a nucleic acid to form a peptide bond. Office Action, page 3. Applicants disagree that a skilled artisan would not appreciate that the inventors had possession of this aspect of the invention. Solely to advance prosecution, however, Applicants have deleted the phrase "and/or nucleic acid molecule" from independent claims 16, 17, 19, and 20. Applicants have also deleted a similar recitation from dependent claim 39. Applicants therefore respectfully request that this rejection of claims 16-20, 39, 41-43 and 48-52 under 35 U.S.C.§ 112, first paragraph be removed.

Claims 16-20, 39, 41-43 and 48-52 also stand rejected under 35 U.S.C.§ 112, first paragraph for allegedly "containing subject matter which was not described in the specification in such a way as to enable one skilled in the art . . . to make and/or use the invention" as it relates to the linkage of a peptide or protein to a nucleic acid molecule via an amide linkage. Applicants disagree that this subject matter is not enabled. However, to expedite prosecution of the application, Applicants have deleted the phrase "and/or nucleic acid molecule" from independent claims 16, 17, 19, and 20. Applicants have also deleted a similar recitation from dependent claim 39. Applicants therefore respectfully request that this rejection of claims 16-20, 39, 41-43 and 48-52 under 35 U.S.C.§ 112, first paragraph be removed.

II. Rejections Under 35 U.S.C. §112, 2nd Paragraph

The Office Action rejects claims 17, 18, 20, 48, and 52 under 35 U.S.C.§ 112, second paragraph as allegedly being indefinite for reciting a "marker molecule composition" (in independent claims 17 and 20) because step (c) of claims 17 and 20 are performed "optionally." Office Action, page 5. Applicants have amended independent claims 17 and 20 to remove the word "optionally" from step (c), such that step (c) must be performed at least once. Applicants assert that claims 17, 18, 20, 48, and 52 are now definite, and respectfully request that the rejection of these claims under 35 U.S.C.§ 112, second paragraph be removed.

III. Rejections Under 35 U.S.C. §103

A. U.S. Patent 6,326,468 ("the '468 patent")

Claims 16, 17, 19, 20, 39, 42, 43, 51, and 52 stand rejected under 35 U.S.C.§ 103 as being unpatentable over U.S. Patent 6,326,468 ("the '468 patent"). Office Action, page 6. The Office Action asserts that a peptide molecule that includes weakly UV-absorbing amino acids, as well as particular weakly UV-absorbing amino acids within a peptide molecule, can be considered a label. Applicants disagree that this interpretation follows the specification.

Solely to expedite prosecution and not in acquiescence to the rejection, however, Applicants have amended independent claims 16, 17, 19, and 20 such that the phrase "with the proviso that the label is not an amino acid" is removed from the claim. In addition, applicants have removed "fluorophores and UV absorbing groups" from step (a) of claims 16, 17, 19, and 20 such that the claims now read "(a) labeling a molecule with a chromophore."

Among other requirements, a reference (or combination of references) must teach or suggest every limitation of a claim to render the claim obvious under 35 U.S.C. § 103. *See* M.P.E.P., 8th ed., § 2143.03 (rev. 2, May 2004). Because the '468 patent fails to teach the methods of claims 16, 17, 19, 20, 39, 42, 43, 51, and 52 that include

"labeling a molecule with a chromophore," this rejection is now believed to be moot. It is noteworthy that although certain fluorophores are chromophores, weakly UV-absorbing amino acids are not chromophores. Applicants respectfully request that the Examiner reconsider and withdraw this rejection.

B. U.S. Patent No. 6,307,018 ("the '018 patent")

Claims 16, 17, 19, 20, 39, 42, 43, 51, and 52 are rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,307,018 ("the '018 patent") which allegedly discloses use of a coupling procedure that can join two peptides, where a peptide can include an amino acid that absorbs UV light. Office Action, page 8. Applicants disagree that the '018 patent discloses ligation methods in which a C_α-thioester and a thiol-containing moiety react to form a peptide bond, as recited in independent claims 16, 17, 19, and 20.

However, as discussed in the previous section, Applicants have amended independent claims 16, 17, 19, and 20 such that the claimed methods recite "labeling a molecule with a chromophore." Ligation of a molecule labeled with a chromophore is not disclosed in the '018 patent.

Among other requirements, a reference (or combination of references) must teach or suggest every limitation of a claim to render the claim obvious under 35 U.S.C. § 103. *See* M.P.E.P., 8th ed., § 2143.03 (rev. 2, May 2004). Because the '018 patent fails to teach or suggest all of the limitations of the independent claims, this rejection is now believed to be moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw this rejection.

C. U.S. Patent No. 6,476,190 ("the '190 patent")

Claims 16, 17, 19, 20, 39, 42, 43, 51, and 52 are rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,476,190 ("the '190 patent"). Office Action, page 9. The Office Action alleges that the '190 patent discloses ligation methods in which a C_α-thioester and a thiol-containing moiety react to form a peptide bond, as recited in independent claims 16, 17, 19, and 20. Applicants respectfully disagree.

Nevertheless, Applicants have amended independent claims 16, 17, 19 and 20 such that the claimed methods recite "labeling a molecule with a chromophore." Ligation of a molecule labeled with a chromophore is not disclosed in the '190 patent.

Among other requirements, a reference (or combination of references) must teach or suggest every limitation of a claim to render the claim obvious under 35 U.S.C. § 103. *See* M.P.E.P., 8th ed., § 2143.03 (rev. 2, May 2004). Because the '190 patent fails to teach or suggest all of the limitations of the independent claims, this rejection is now believed to be moot. Applicants respectfully request that the Examiner reconsider and withdraw this rejection.

D. U.S. Patent No. 6,326,468 in view of U.S. Patent No. 5,593,876; 5,698,521; 5,713,364; 5,662,917; or 5,562,100

Claims 16, 17, 19, 20, 39, 42, 43, 51, and 52 are rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,326,468 ("the '468 patent") in combination with any of U.S. Patent No. 5,593,876, U.S. Patent No. 5,698,521, U.S. Patent No. 5,713,364, U.S. Patent No. 5,662,917 or U.S. Patent No. 5,562,100. Office Action, page 9.

Applicants disagree that these references render the claims obvious. Solely to expedite prosecution and not in acquiescence to the rejection, Applicants have amended independent claims 16, 17, 19, and 20 such that the claimed methods recite that step (a) of the methods requires "labeling a molecule with a chromophore." This element of the amended claims is not disclosed in the cited references.

Among other requirements, a reference (or combination of references) must teach or suggest every limitation of a claim to render the claim obvious under 35 U.S.C. § 103. *See* M.P.E.P., 8th ed., § 2143.03 (rev. 2, May 2004). Because the cited patents fail to teach or suggest all of the limitations of the independent claims, this rejection is now believed to be moot. Applicants respectfully request that the Examiner reconsider and withdraw this rejection.

E. U.S. Patent No. 6,307,018 in view of U.S. Patent No. 5,593,876; 5,698,521; 5,713,364; 5,662,917; or 5,562,100

Claims 16, 17, 19, 20, 39, 42, 43, 51, and 52 are rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,307,018 ("the '018 patent") in combination with any of U.S. Patent No. 5,593,876, U.S. Patent No. 5,698,521, U.S. Patent No. 5,713,364, U.S. Patent No. 5,662,917 or U.S. Patent No. 5,562,100. Office Action, page 10.

Applicants disagree that these references render the claims obvious. Solely to expedite prosecution and not in acquiescence to the rejection, Applicants have amended independent claims 16, 17, 19, and 20 such that the claimed methods recite that step (a) of the methods requires "labeling a molecule with a chromophore." This element of the amended claims is not disclosed in the cited references.

Among other requirements, a reference (or combination of references) must teach or suggest every limitation of a claim to render the claim obvious under 35 U.S.C. § 103. *See* M.P.E.P., 8th ed., § 2143.03 (rev. 2, May 2004). Because the cited patents fail to teach or suggest all of the limitations of the independent claims, this rejection is now believed to be moot. Applicants respectfully request that the Examiner reconsider and withdraw this rejection.

F. U.S. Patent No. 6,476,190 in view of U.S. Patent No. 5,593,876; 5,698,521; 5,713,364; 5,662,917; or 5,562,100

Claims 16, 17, 19, 20, 39, 42, 43, 51, and 52 are rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,307,018 ("the '018 patent") in combination with any of U.S. Patent No. 5,593,876, U.S. Patent No. 5,698,521, U.S. Patent No. 5,713,364, U.S. Patent No. 5,662,917 or U.S. Patent No. 5,562,100. Office Action, page 11.

Applicants disagree that these references render the claims obvious. Solely to expedite prosecution and not in acquiescence to the rejection, Applicants have amended independent claims 16, 17, 19, and 20 such that the claimed methods recite that step (a) of the methods requires "labeling a molecule with a chromophore." This element of the amended claims is not disclosed in the cited references.

Among other requirements, a reference (or combination of references) must teach or suggest every limitation of a claim to render the claim obvious under 35 U.S.C. § 103. *See* M.P.E.P., 8th ed., § 2143.03 (rev. 2, May 2004). Because the cited patents fail to teach or suggest all of the limitations of the independent claims, this rejection is now believed to be moot. Applicants respectfully request that the Examiner reconsider and withdraw this rejection.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Aaron L. Schwartz
Attorney for Applicants
Registration No. 48,181

Date: November 7, 2005

1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600

462848_1.DOC